

CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims.

1. (Currently Amended) A method of using a decoder to blend a first object with
a second object, thereby resulting in a blended object, for composing a scene
containing a plurality of objects, an each object comprising chrominance and
luminance components, a chrominance value being associated with a set of at least
two luminance values, wherein said method comprises;
~~a step of blending a first object with a second object resulting in a blended~~
~~object, said step comprising the sub-steps of:~~
~~generating using the decoder to generate the a~~ luminance component of the
blended object from the corresponding luminance components of the first object and
~~the second objects object,~~ and from a first composition function, the first composition
function based upon at least a transparency component $N_{\alpha y}$ of the luminance
component of the first object;[,] and
~~generating using the decoder to generate the a~~ chrominance component of the
blended object from the corresponding chrominance components of the first object
and the second object, and from a second composition function, the second
composition function depending on a set of associated values of the first composition

17 function and based upon at least a transparency component Nalpha uv of the
18 chrominance component of the first object.

1 2. (Canceled)

1 3. (Currently Amended) ~~A~~ The method for composing a scene as claimed in of
2 claim 1~~claim 2~~, wherein ~~a~~ the chrominance value is associated with ~~4~~ with four
3 luminance values ~~and 4~~ and four transparency values, the second composition
4 function being an average of ~~the 4~~ the four transparency values.

1 4. (Currently Amended) ~~A~~ The method for composing a scene as claimed in of
2 claim 1, wherein the first composition function depends on a shape component.

1 5. (Currently Amended) ~~A~~ The method for composing a scene as claimed in of
2 claim 4, wherein ~~a~~ the chrominance value is associated with ~~4~~ with four luminance
3 values ~~and 4~~ and four shape values, the second composition function being an 'OR'
4 function between ~~the 4~~ the four associated shape values.

1 6. (Currently Amended) A decoder that blends a first object with a second
2 object, thereby producing a blended object, for composing a scene containing a
3 plurality of objects, an object~~each object~~ comprising chrominance and luminance

components, a chrominance value being associated with a set of at least two
luminance values and at least one transparency value, said decoder comprising:

~~means for blending a first object with a second object resulting in a
blended object, said blending means comprising:~~

luminance generation means for generating a luminance component of
the blended object from the corresponding luminance components of the first
object and ~~the second objects object~~, and from a first composition function, the
first composition function based upon at least a transparency component
Nalpha_y for the luminance component of the first object, and

chrominance generation means for ~~a~~generating the chrominance
component of the blended object from the corresponding chrominance
components of the first object and the second object, and from a second
composition function, the second composition function depending on a set of
associated values of the first composition function and based upon at least a
transparency component Nalpha_{uv} for the chrominance component of the
first object.

7. (Canceled)

8. (New) A decoder comprising:

a demultiplexer coupled to at least a first object and a second object, the first
object and the second object comprising chrominance and luminance components;

4 a shape decoder coupled to the demultiplexer;
5 a motion decoder coupled to the demultiplexer;
6 a texture decoder coupled to the demultiplexer;
7 a motion compensation circuit coupled to the shape decoder and the motion
8 decoder;

9 a reconstruction circuit, coupled to the shape decoder, the texture decoder,
10 and the motion decoder, the reconstruction circuit producing a blended object as an
11 output signal; and

12 a picture memory coupled to the reconstruction circuit that provides a
13 feedback signal to the motion compensation circuit, wherein:

14 the luminance component of the blended object is generated from the
15 corresponding luminance components of the first and second objects and from a first
16 composition function, the first composition function based upon at least a
17 transparency component N_{α_y} for the luminance component of the first object,
18 and

19 the chrominance component of the blended object is generated from the
20 corresponding chrominance components of the first object and the second object, and
21 from a second composition function, the second composition function depending on a
22 set of associated values of the first composition function and based on at least a
23 transparency component $N_{\alpha_{uv}}$ for the chrominance component of the first
24 object.

1 9. (New) The method of claim 1, wherein each transparency component is a product
2 of a global alpha value, at least one gray alpha value, and at least one binary shape
3 value.

1 10. (New) The decoder of claim 6, wherein each transparency component is a
2 product of a global alpha value, at least one gray alpha value, and at least one
3 binary shape value.

1 11. (New) The decoder of claim 8, wherein each transparency component is a
2 product of a global alpha value, at least one gray alpha value, and at least one
3 binary shape value.